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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,724	12/15/2003	Ken A. Nishimura	10031375-1	3578

7590 08/10/2005

AGILENT TECHNOLOGIES, INC.  
Legal Department, DL 429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER

NGUYEN, HUNG

ART UNIT PAPER NUMBER

2851

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/736,724

**Applicant(s)**

NISHIMURA ET AL.

**Examiner**

Hung Henry V. Nguyen

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Upon reconsideration and in view of applicant's remarks filed June 8, 2005, the Examiner has decided to examine all of the claims as originally filed in order to avoid the possibility of multiple patents to relatively the same invention. Therefore, the restriction made May 25, 2005 is hereby vacated.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-4, 6-17, 19, 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Venkateswar (U.S.Pat. 5,721,622).

With respect to claims 11 and 22, 24-25, Venkateswar (figure 1) discloses a photolithography apparatus comprising all structures set forth in the instant claims such as: light modulation elements (12), a first set of the light modulations elements ( for example 28) operable to photolithographic ally transfer a portion of an image onto a region of a substrate (10); and a second set for the light modulation elements (for example 26) operable to photolithographic ally transfer the portion of the image onto the area of the substrate (see col.5, lines 31-57) and memory elements (13) in communication with respective ones of the light modulations elements, and the memory elements being configured to store data representing the portion of the image.

As to claims 12-13, Venkateswar further teaches the image is divided into image sections and image subsections wherein the portion of the image corresponds to one of the image subsection (see figures 2-3).

As to claims 14-16, Venkateswar teaches the light modulation elements are arranged in an array having rows and columns (see figures 4-6; see col.4, lines 1-11).

As to claim 17, Venkateswar discloses the light modulation elements being liquid crystal material (see col.3, lines 36).

As to claim 19, Venkateswar discloses that the light modulation elements comprise micromirrors (see col.5, lines10-15).

As to claim 21, Venkateswar discloses third set of light modulation elements being operable to photolithography transfer the portion of the image onto the area of the substrate.

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As to claim 23, Venkateswar discloses a laser light source (12) for illuminating the spatial light modulator.

As to claims 1-4, 6-10, the claimed method is seen to be inherent teachings in existence of the above apparatus.

4. Claims 1-17 and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Sandstrom (U.S. Pat. 6,618,185).

With respect to claims 1-4, 6-17, 19-25, Sandstrom (figure 1) discloses a photolithography apparatus and corresponding method comprising all of the limitations of the instant claims such as: light modulation elements (30), a first set of the light modulations elements operable to photolithographic ally transfer a portion of an image onto a region of a substrate (60); and a second set and third set for the light modulation elements operable to photolithographic ally transfer the portion of the image onto the area of the substrate (see col.2, lines 60-67); memory elements (30) in communication with respective ones of the light modulations elements, and the memory elements being configured to store data representing the portion of the image and a laser light source (10) coupled to the spatial light modulation elements for illuminating the spatial light modulation elements and a stage operable to one of the spatial light modulation elements and the substrate relative to each other (see col.4, lines 8-24). Sandstrom teaches the image is divided into image sections and image subsections wherein the portion of the image corresponds to one of the image subsection (see figures 2-3) and the light modulation elements are arranged in an array having rows and columns (see figure 2). Furthermore, Sandstrom, discloses the light modulation elements being liquid crystal material

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(see col.1, lines 29) or the light modulation elements comprise micromirrors (see col.2, lines20-21).

As to claims 5 and 20, Sandstrom teaches wherein the first set of the light modulation elements including a defective light modulation element, the second set of the light modulation elements corresponding to the defective light modulation element in the first set of light modulation element is not defective (see col. 4, lines 25-31).

As to claim 18, Sandstrom further discloses the light modulation elements having common electrode and pixel electrodes (see figure 8).

***Prior Art Made of Record***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

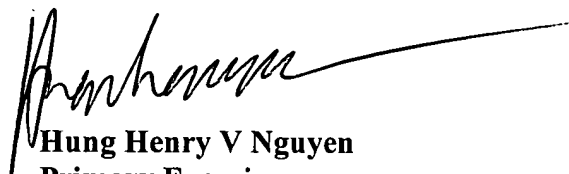
Fries (U.S.Pat. 6,544,698); Bleeker et al (US 2005/0046819 A1); Kanatake et al (U.S.Pat. 6,606,739) and Jain et al (U.S.Pat. 6,312,134) disclose photolithography devices, each of which comprises substantially all of the elements as recited in the instant claims of the present invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V. Nguyen whose telephone number is 571-272-2124. The examiner can normally be reached on Monday-Friday (First Friday off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hung Henry V Nguyen', with a long horizontal flourish extending to the right.

**Hung Henry V Nguyen**  
**Primary Examiner**  
**Art Unit 2851**

hvn  
8/4/05